

Plenary Sessions

DOING BUSINESS WITH EERE ENERGY EFFICIENCY AND RENEWABLE ENERGY

25 June 2008



INTRODUCTION

- Organization
 - Business Administration
 - Technology Development "10 Programs
 - Solar, Biomass, Industries, Vehicles, H2, Geothermal, FEMP, Wind/Hydro, OWIP, and Buildings
- Mission Fund activities in 3-D to develop, demonstrate and deploy energy efficiency and renewable energy technologies

Contacts at DOE HQ include:

EERE Call Center Phone # 1 877 337 3463

EERE Procurement Team Leader Tobin.Gatto@ee.doe.gov

Contracting Officer Representative Kent.Hibben@ee.doe.gov

Small Business Program Manager <u>Turnetta.Cook@ee.doe.gov</u>

Grants and Financial Assistance Procurement Specialist LaTonya.Poole@ee.doe.gov



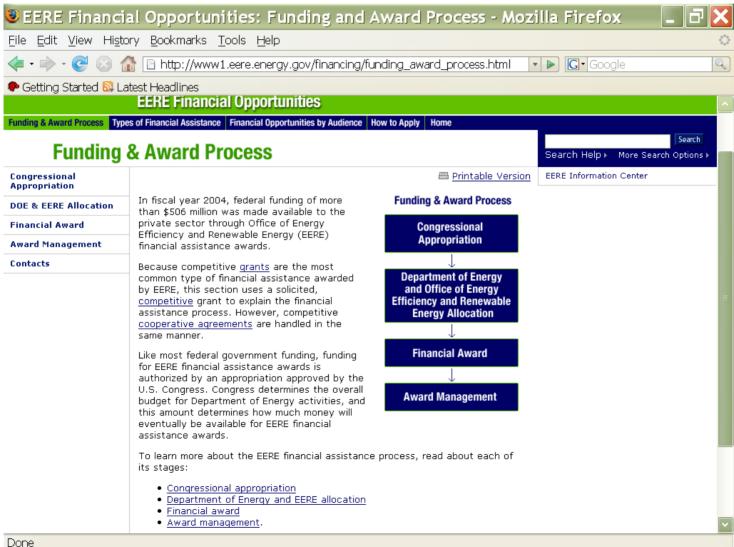
- Acquisition (Contracts)
 - National Laboratories R&D \$500 Million
 - Industry Technical Services \$50 Million
- Financial Assistance (Grants) Over \$800 Million

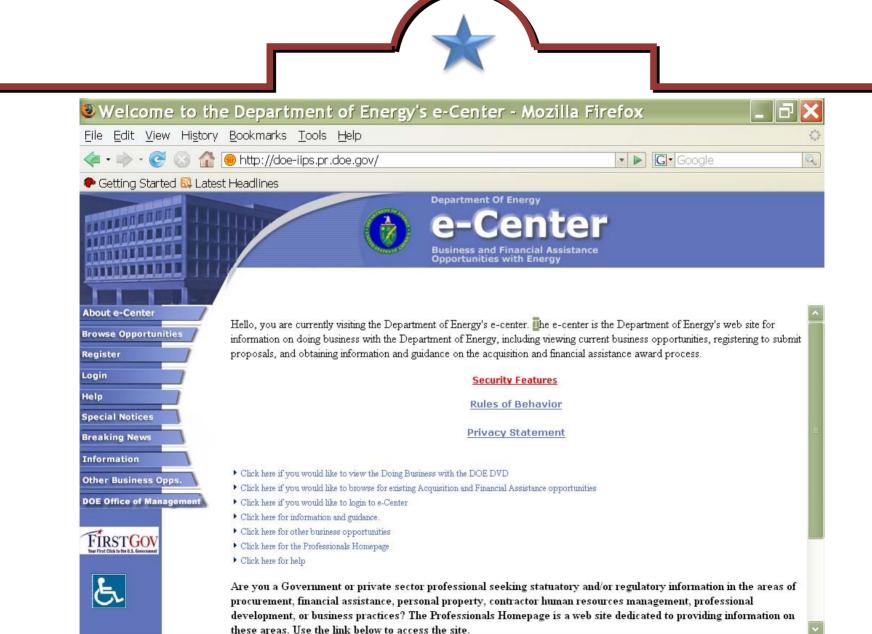


 Subcontracting from National Labs (Approximately \$150 Million)

 Prime Awards Via Competitive Solicitations for both contracts and financial assistance (Approximately \$250 Million)



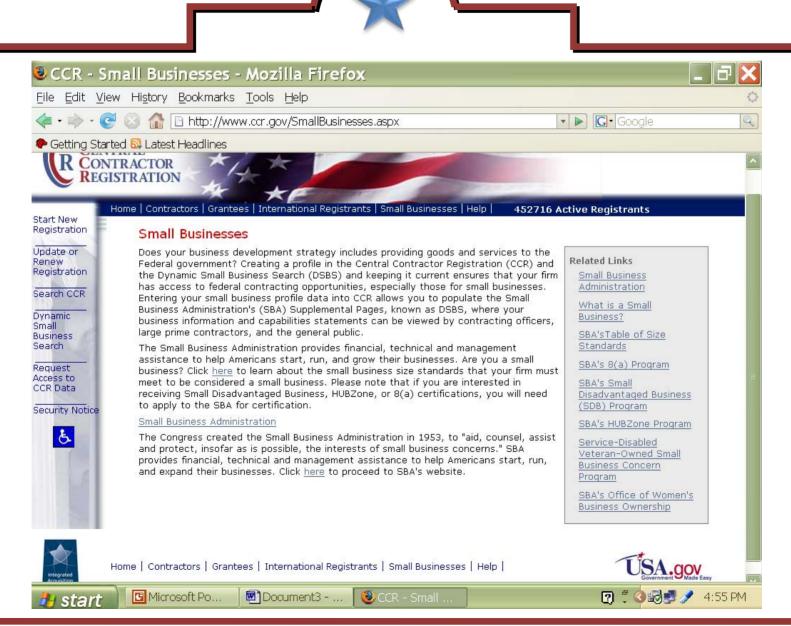




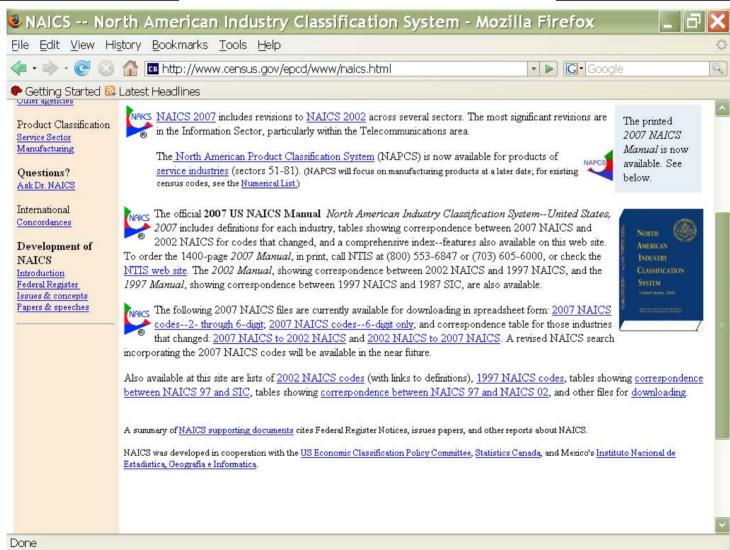
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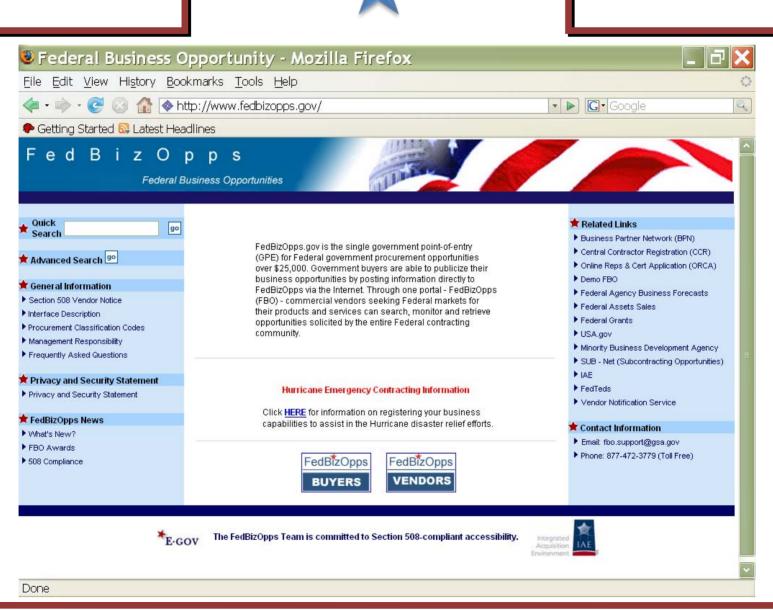
HOW DO I GET FUNDS

- Get qualified to receive Grants
 - Apply for a Data Universal Numbering System (DUNS) Number smallbusiness.dnb.com. This is the industry standard for business listings
 - Register in the Central Contractor Registry (CCR)
 Here you can determine your relevant North American Industry
 Classification System (NAICS) code. This IDs what type of small business you can be recognized/compete as. The DUNS #, and NAICS provide prospective clients statistics with which to compare potential vendors.
 - Apply to a Solicitation/Funding Opportunity Announcement
 - www.fedbizopps.com
 - www.grants.gov (one way to contact National Labs, stewarded by the DOE office of Science www.er.doe.gov)
 - http://doe-iips.pr.doe.gov









Opportunities exist at many levels...

Stakeholders can contact

- DOE-affiliated organizations and efforts,
- State Energy offices/Chambers of Commerce,
- Federal job sites, trade associations,
- Congresspersons, DOE Small Business
 Conference attendees, and other Minority
 Educational institutions...



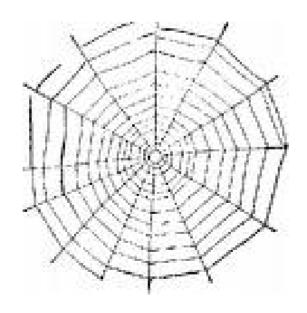
Named Institution Type of Institution	Contact Information	related researchin	concluted researchin thisarea	facilities and expertise to conduct	Uriversity/College or	receive Solicitations for research
		thisarea ———————————————————————————————————			National Laboratory in this research area	Gansinthsæ

 To update your information, fill in the blanks and email to <u>Annie.Whatley@hq.doe.gov</u>. These data will be added to the EERE list of all US Minority Educational Institutions, for rapid identification of which MEIs are involved in _____.

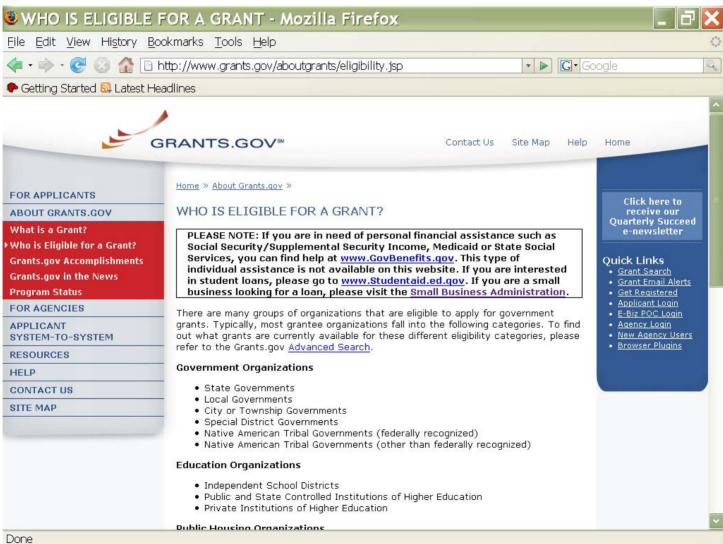


Connections...

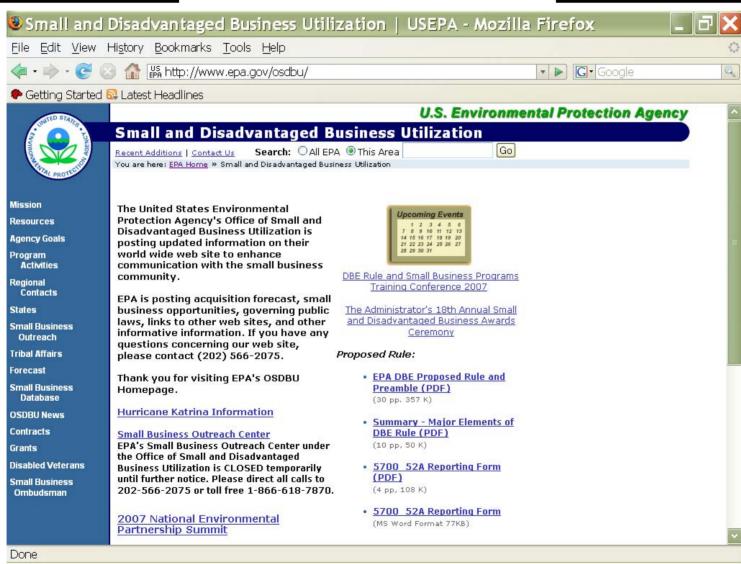
 branching out – going inward – circling or combining with the competition

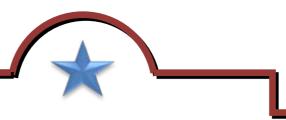




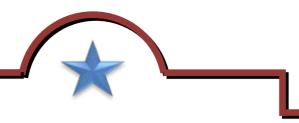














In Summary

- DOE/<u>EERE</u> partnerships focus on reNEWable ENERGY
 - DOE and other Federal Agencies are furthering the Administration's Advanced Energy Initiative to hasten partnerships commercializing reNEWable ENERGY industries systems to save \$s and secure our future.
 - DOE's Change a light campaign, with its CFL mascot, just like range of actions steering ORNL into tomorrow, shows how at every level your home, school, business or organization can get these technologies of the future off the shelf, plugged in, --and lit up!



Additional Thoughts #1

#1 Participation in Energy-related activities crosses the spectrum of business skills

The web = the power grid = energy marketplace; intersections, spokes, and arcs each have opportunities to participate, by joining current, (or establishing new) niches



- Determining the best source of energy for a client (consulting)
- Obtaining energy (extraction rights, zoning expertise, licensing/ purchasing agreements
- Generation participation in EERE technology Research, Development and Deployment, Involvement in power plants' activities
- Distribution Wheeling (green) energy, building infrastructure to ease consumer access to alternative energy (ethanol at gas stations)
- Utilization Audits to show stakeholders how best to use new technologies
- Conservation Help clients decrease energy costs (all the building trades witness the Solar Decathalon's use of skills from carpentry to computer science
- Return on investment demonstrate to venture capitalists and other financial market stakeholders that energy investments hold promise and thus deserve action in the capital market.
- The inventor population creating opportunities for participation and support of proof-of-concept activities, supporting energy stakeholders with legal (patents/licensing actions), adminstrative, and analytical support
- Partnerships with educational institutions, (assisting and employing various student populations);
 trade organizations, (networking to change competitors into alliances); governments at local, county,
 State and Federal level (helping them meet their legislative goals)

Additional Thoughts #2

- Websites and Contact Information for Various Sources of Business Opportunities with
- The US Department of Energy
- To obtain information on EERE products, services, and business opportunities you may call the EERE call center at 1-877-337-3463 or go to the website http://www.eere.doe.gov and click on "EERE Information Center".
- For assistance on how to sell to the government or if you feel you are overwhelmed by registrations, certifications, and solicitation requirements you may want to contact your nearest **Procurement Technical Assistance Center (PTAC).**They can provide you with an understanding of the requirements of government contracting, and the know-how to obtain and successfully perform federal, state and local government contracts. See their website www.aptac-us.org for assistance.
- <u>SBIR and STTR Programs:</u> The SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) programs are two competitively awarded, three-phase Federal Government programs designed to stimulate technological innovation and provide opportunities for small businesses. These dynamic teamings of the private and public sectors include joint venture opportunities for small businesses and the nation's premier nonprofit research institutions.

The SBIR program solicitations are issued by eleven Federal agencies, including the Department of Agriculture, the Department of Commerce, the Department of Defense, the Department of Education, the Department of Energy, the Department of Health and Human Services, the Department of Homeland Security, the Department of Transportation, the Environmental Protection Agency, the National Aeronautics and Space Administration, and the National Science Foundation. For more information about the SBIR program, visit http://www.sba.gov/sbir/indexsbir-sttr.html. In addition, Federal agencies maintain department-specific SBIR and STTR programs Web pages.

- Various SBIR and STTR websites: http://sbirworld.com or http://zyn.com/sbir/ or the Department of Defense website: http://sbirworld.com or http://zyn.com/sbir/ or the Department of Defense website:
- **EERE Financial Opportunities:** Through financial assistance, EERE provides funding for renewable energy and energy efficiency research and development. Financial assistance awards transfer money, property, or services to a recipient so that it can accomplish a public purpose authorized by Federal statute. For example, a financial assistance award might be used to fund research to improve the efficiency of photovoltaic cells. Grants are usually awarded through a <u>competitive solicitation process</u>. In this scenario, EERE solicits applications in specific research areas and selects from the submissions based on merit. See the below websites:
- http://www.grants.gov/
- http://www1.eere.energy.gov/financing/

Additional Thoughts #3

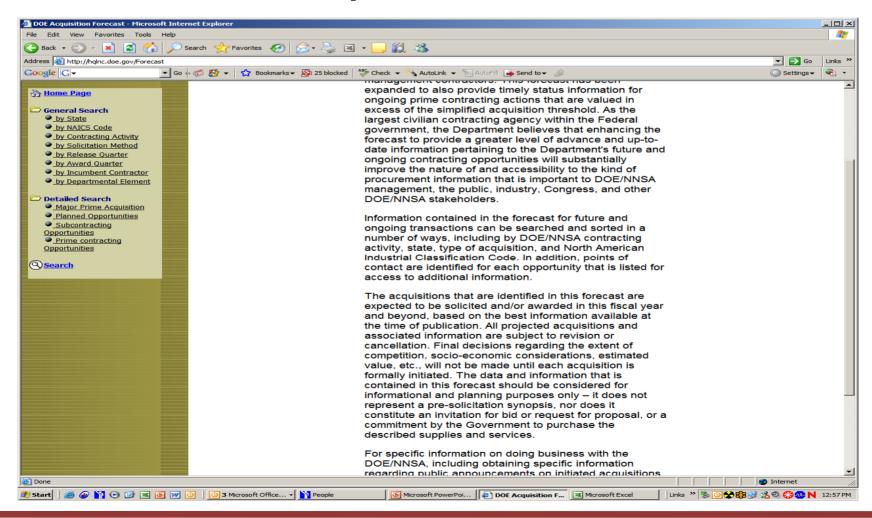
- <u>EERE State Activities and Partnerships:</u> The EERE State Activities & Partnerships Web site
 http://www.eere.energy.gov/states/ links to DOE's Office of Energy Efficiency and Renewable Energy (EERE)
 partnerships with and projects in the States' energy offices. Here you will find:
- EERE-sponsored projects in the states
- EERE's cooperative projects and grants to the states
- Breaking news about state involvement in energy projects
- State energy statistics
- State maps of renewable energy resources
- Case studies and state publications.
- Acquisitions:
- The U.S. Department of Energy, Office of Headquarters Procurement Services, employs a secure, web-enabled acquisition and financial assistance system, the Industry Interactive Procurement System (IIPS). IIPS provides for the posting of solicitations, receipt of offers, conducting of clarifications or discussions, evaluation of offers or bids, and award of task orders in a paperless environment via the Internet. To get more information about IIPS and to register your company, go to http://e-center.doe.gov. To register your company follow the link marked "Register" on the E-center homepage. At the register page you should choose to register for IIPS and follow the on screen directions to complete this process. If you have problems or questions in using IIPS please contact the help line at (800) 683-0751.
- Website: http://www.fedbizopps.gov/
- Cooperative Research and Development Agreements (CRADAs).
- CRADAs are partnerships in which a private sector partner and a national laboratory work together to further
 research and development. In the simplest form of a CRADA partnership, each party contributes equally to the
 project in terms of labor, funding, and facilities. In more complex arrangements, the private partner may opt for a
 "funds in" arrangement, in which it defers part of the laboratory's expenses. See
 http://www1.eere.energy.gov/financing/cradas.html for additional information concerning CRADAs.
- <u>Unsolicited Proposals:</u>
- You may want to investigate our unsolicited proposal site at http://www.netl.doe.gov/business/usp/USPGuide.pdf.



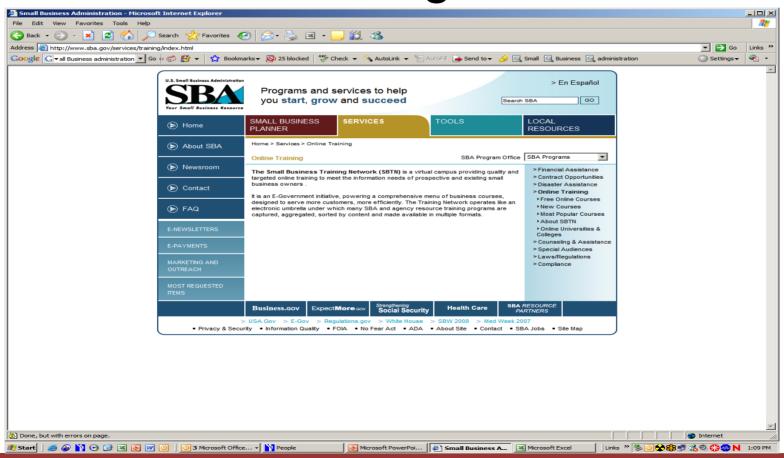
Plenary Sessions

http://energy.gov/texas

DOE Acquisition Forecast



SBA Writing, Including Proposal Writing



Definition of a Small Business (NAICS codes) and Small Business Types

- A small business, including its affiliates, is one that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria in 13 CFR part 121, and NAICS size standards.
- The NAICS codes determine whether a business is considered small by their industry code. These
 codes pertain to the size of the firm and not the value of the procurement. The standards are set by
 either the number of employees or by the average annual sales over a three-year period. Click here to
 look up your <u>NAICS code</u>.
- Small Disadvantaged Business is a small business that is: at least 51% owned by one or more socially
 and economically disadvantaged people or in the case of any publicly owned business, at least 51% of
 the stock of which is owned by one or more disadvantaged people; is a U.S. citizen; owns, operates and
 manages the business on a daily basis; and is in business at least one year.
- The owner(s) must have less than \$750,000 personnel net worth at the time of application & during participation.
- To do business with BNL an small disadvantaged business company **must be certified** with the <u>small</u> business administration.



U.S. Department of Energy - Energy Efficiency and Renewable Energy EERE State Partnerships and Activities



- The Strategic Energy Analysis and Applications Center (SEAAC) integrates and supports the <u>energy analysis</u> functions of the lab and leads NREL's efforts in <u>applying technologies</u> via both national and international markets. This center consists of six groups, which were integrated to form a synergistic center focusing on these key lab activities. They include:
- Program Planning and Analysis (<u>Doug Arent</u>)
- Energy Market, Technology, and Policy Analysis (Maggie Mann)
- International and Environmental Studies (<u>Dan Bilello</u>)
- Energy Forecasting and Modeling (Walter Short)
- State, Local, and Tribal Integrated Applications (Roger Taylor)
- Energy Management and Federal Markets (<u>Nancy Carlisle</u>)
- In the analysis arena, the center promotes understanding and collaboration through all of its analysis activities. NREL and SEAAC conduct a broad range of energy analysis in support of NREL programs and initiatives, DOE's Office of Energy Efficiency and Renewable Energy (EERE), technology transfer and the greater energy analysis community. The applications side of the center helps stakeholders determine the right clean energy technologies, programs, and strategies for a city, state, country, and large or small business. SEAAC experts also can help these groups reduce energy costs, find the best energy strategy for an application, analyze energy systems, and inform energy policy.
- Analysis at NREL aims to increase the understanding of the current and future characteristics, roles, and interactions of government, markets, and technologies. The acquired understanding is used to inform technology, benefits, market, policy, and program decisions as energy efficient and renewable energy technologies advance from concept to commercial application.

NREL's <u>technology analysis</u> evaluates the attributes of renewable energy technologies, examining RD&D areas in terms of potential costs, benefits, risks, uncertainties, and timeframes. The Lab's <u>benefits analysis</u> looks at the economic, environmental, security, and other impacts of current renewable energy programs. NREL's <u>market analysis</u> helps key players increase the use of energy efficiency and renewable energy technologies in the marketplace through understanding of market responses. Through <u>policy analysis</u>, the Lab evaluates rules and regulations that can advance — or provide alternatives to — renewable energy technologies in meeting national goals. The Lab's <u>program analysis</u> conducts work that determines the goals of the Department of Energy's (DOE) budgeting, planning, and management functions.



Working with Us

- NREL works closely with states and local communities, facilitating collaborative efforts that are key to moving clean energy technologies into the marketplace and promoting their use.
- If you're interested in learning more about NREL's expertise in these areas, access the Strategic Energy Analysis and Applications Center (SEAAC) Staff page for information on our individual capabilities, as well as SEAAC staff's experience with various projects and initiatives.
- You can also find out more about funding mechanisms, developing technology partnerships, licensing our technologies, and using NREL's facilities at Working with Us.
- More Information
- For more information about U.S. state and local energy options and projects, see the following Web sites:
- State Activities and Partnerships
- State Energy Alternatives
- Database of State Incentives for Renewable Energy (DSIRE)
- Environmental Protection Agency (EPA) State and Local Information
- NREL can help you meet your energy and environmental goals using renewable energy and energy efficiency technologies. Tap into our technical expertise for alternative energy approaches and solutions that are:
- Crosscutting
- Integrative
- Unbiased
- Innovative
- Economically viable.
- We extend our technical assistance worldwide—from small, rural electricity projects to large, national energy programs. We can tailor our assistance based on your needs.
- NREL provides assistance to key stakeholders, including projects and initiatives for:
- The Federal Energy Management Program
- International and developing countries
- U.S. state and local communities
- U.S. tribal communities
- Learn more about our <u>capabilities</u>. We can help you make informed decisions about applying renewable energy and energy efficiency technologies.
- NREL's Strategic Energy Analysis and Applications Center leads the laboratory's collaborative



NetL Proj. Mgmt Ctr

- The National Energy Technology Laboratory (NETL), part of DOE's national laboratory system, is owned and operated by the U.S. Department of Energy (DOE). NETL supports DOE's mission to advance the national, economic, and energy security of the United States.
- The only U.S. national laboratory devoted to fossil energy research, NETL implements a broad spectrum of energy and environmental research and development (R&D) programs that will return benefits for generations to come:
- Enabling domestic coal, natural gas, and oil to economically power our Nation's homes, industries, businesses, and transportation ...
- While protecting our environment and enhancing our energy independence.
- NETL has expertise in coal, natural gas, and oil technologies, contract and project management, analysis of energy systems, and international energy issues.
- In addition to research conducted onsite, NETL's project portfolio includes R&D conducted through partnerships, cooperative research and development agreements, financial assistance, and contractual arrangements with universities and the private sector. Together, these efforts focus a wealth of scientific and engineering talent on creating commercially viable solutions to national energy and environmental problems.
- Solicitations & Business Opportunities
 NETL Business Contacts
- Acquisition and Assistance Director
 Dale A. Siciliano
 412-386-6073
- Acquisition and Assistance Forms
 Joellen Nieman
 304-285-4307
- Indirect Cost Rate Agreement Andrew J. Ferlic 412-386-4647
- Industry Interactive Procurement System (IIPS) and Electronic Commerce
 Joellen Nieman
 304-285-4307
- Property Manager Richard C. Price 412-386-6196
- Simplified Acquisition Program
 Robert L. Mohn
 412-386-4963
- Site Support/A&E/Construction Contracts
 James Knudsen
 304-285-4530
- Small & Small Disadvantaged Business Specialist Lawrence Sullivan 412-386-6115
- Unsolicited Proposal Manager <u>John N. Augustine</u> 412-386-4524

For information about CRADAs:

- R. Diane Newlon (Morgantown) 304-285-4086
- Michael A. Nowak (Pittsburgh) 412-386-6020
- Paula K.Turner (Albany, OR) 541-967-5966
- Register for acquisition opportunity notices at <u>http://www.fbo.gov/EPSVendorRegistration.html</u>.
- Register for funding opportunity notices at <u>http://www.grants.gov/search/subscribeAdvanced.do</u>.
- Because NETL's programs might involve acquisition and financial assistance opportunities, registering at both websites is suggested. The majority of NETL's research and development procurement programs fall within the Procurement Classification Code "A," and the majority of NETL's financial assistance programs fall within the CFDA number "81.089."



- Solar Cost parity nationwide by 2015
- H2 See slides
- FCVTThe hybrid and vehicle systems team works with its industry partners in the
 <u>FreedomCAR and Fuel Partnership</u> and the <u>21st Century Truck Partnership</u> to identify and
 select the appropriate research and development objectives. Research partners include:
 vehicle and engine manufacturers, universities, material suppliers, nonprofit technology
 organizations, and the national laboratories.
- Geo- EGS for "Enhanced Geothermal Systems"; Biomass ethanol really breaks things into two initiatives.
- Biomass The Advance Energy Initiative (2006) directs the research toward cost competitive cellulosic ethanol by 2012. That is reducing technology for conversion of biomass the ethanol for a price competitive with petroleum fuels.
- Weatherization and Intergovernmental State Energy Program
 allows states the flexibility for setting their own priorities based on local resources and
 economic conditions.
- FEMP The White House Council on Environmental Quality has issued a memo directing federal agencies to significantly increase their use of energy saving performance contracts (ESPCs) and utility energy services contracts (UESCs).
- ITP Plant assessments



Hydrogen: The Policy Context



HYDROGEN FUEL INITIATIVE (Jan. 2003):

- Launched the Department of Energy Hydrogen Program
- Committed \$1.2 billion over five years (2004 2008)
- Provides funds to develop H₂, fuel cell and infrastructure technologies
- Goal: to make fuel cell vehicles practical and cost-effective by 2015



ADVANCED ENERGY INITIATIVE (Feb. 2006):

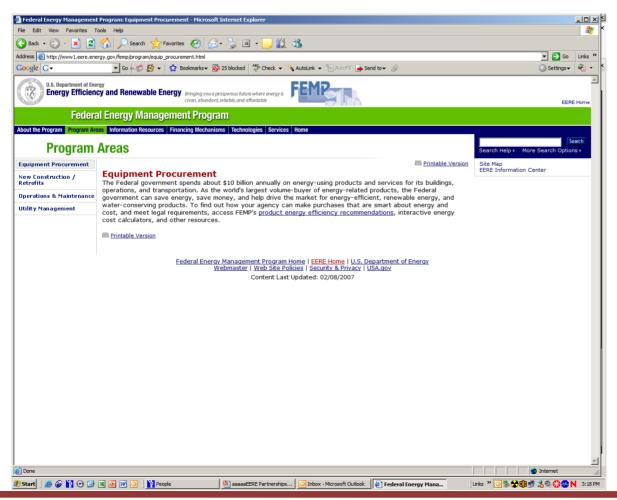
- Accelerates research on technologies for reducing dependence on oil for transportation and natural gas for power generation
- 22% increase in funding for clean energy research
- Reinforces Hydrogen Fuel Initiative
- Accelerates R&D for near-term vehicle options: biofuels & plug-in hybrids



"20-in-10" INITIATIVE (Jan. 2007):

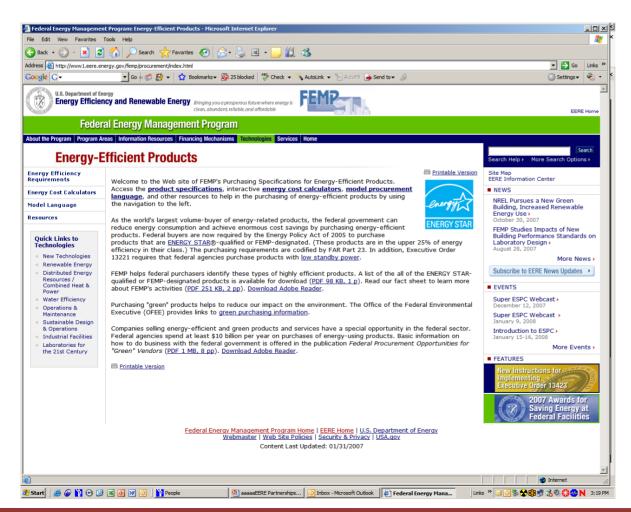
- Sets target of 35 billion gallons of alternative fuels by 2017, to displace 15% of annual gasoline use in 2017 (plus 5% reduction in gasoline use through increased vehicle efficiency)
- Expands Renewable Fuel Standard (RFS) to "Alternative Fuel Standard" (includes corn ethanol, cellulosic ethanol, biodiesel, methanol, butanol, <u>hydrogen</u>, and other alternative fuels)

FEMP equipment procurement



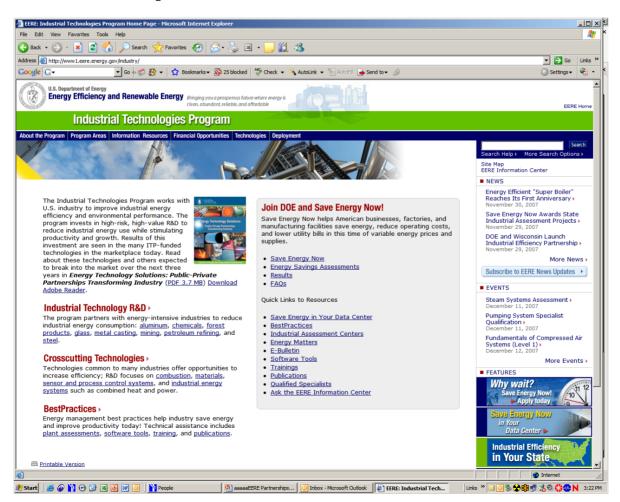
Brush up on the legal, cost and peripheral outcomes of involvement in EERE





the TD
programs
seeking material
and material
handlers of
many skill sets

ITP Input For Businesses





A Sample correspondence **From:** Hibben, Kent **Sent:** Monday, October 29, 2007 2:01 PM

To: Subject: New Information about business opportunities for your devices

- Hello ____ Here are several additional leads:
- 11.) Office of Energy Efficiency and Renewable Energy Announces Entrepreneur in Residence Program
- Moving technology out of the laboratory and into the marketplace is one of EERE's major hurdles, and one of its biggest priorities. Assistant Secretary Alexander Karsner created a Commercialization Team in 2006 to work on accelerating this process. Now this effort is moving to the next level.
- The Entrepreneur in Residence (EIR) Program will bring venture capital-sponsored entrepreneurs to help commercialize new clean energy technologies. The EIRs will identify technologies that will contribute to DOE's mission to promote America's energy security through reliable, clean, and affordable energy, then work to bring them to the market.
- ORNL, and NREL and SNLwill each host one entrepreneur in residence. DOE will provide up to \$300,000 in funding to support this initiative.
- How to Apply
- See the <u>Funding Opportunity Announcement</u> on Grants.gov. Applications are due _______, 2007.
- For more information, see the <u>Entrepreneur in Residence</u> listing on the EERE Financial Opportunities Web site.
- 12.) Note that the National Nuclear Security Administration, also has an active Small Business office: Gary.Lyttek@nnsa.doe.gov is a Small-Business point of contact there.
- 13.) FAA Research http://www.faa.gov/education_research/research/modernization_highlights/costsharing_opportunities/
- Cost Sharing Partnership Opportunities

...,

Sincerely, Kent L. Hibben, COR, Procurement Liaison EERE"